

CLAIMS

What is claimed is:

1. A method for manufacturing a plurality of items in parallel comprising;
5 selecting a sample of manufactured items from a plurality undergoing a process;
subjecting said sample to further processing;
identifying a quality of the selected sample ; and
if said quality is determined to be satisfactory, then subjecting a remainder of said
manufactured items to said further processing.
- 10 2. The method of claim 1 wherein the plurality of the items to be manufactured are chips on
a wafer.
- 15 3. The method of claim 2 wherein the chips are comprised of biological material.

4. The method of claim 3 wherein the biological material is selected from the group
consisting of DNA, RNA, amino acids or analogs thereof.
- 20 5. The method of claim 2 wherein said further processing is packaging of the chips.
6. A method of manufacturing arrays of nucleic acids comprising
fabricating a plurality of duplicate nucleic acid arrays on a substrate;
separating said plurality of arrays;

packaging selected of said arrays;
testing said selected arrays; and
if said selected arrays pass said testing step, packaging a remainder of said plurality of arrays.

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7. The method of claim 6 wherein said arrays are manufactured by light directed synthesis.
8. The method of claim 6 wherein said arrays are manufacture by nucleic acid spotting.
- 10 9. The method of claim 6 wherein said arrays are made by ink jet synthesis.
10. The method of claim 6 wherein said arrays are separated by sawing.
11. The method of claim 6 wherein said arrays are separated by scribing.
- 15 12. The method of claim 6 wherein said arrays are separated by scribing.
13. The method of claim 1 wherein the plurality of items to be manufactured are substrates for chip synthesis on an array.
- 20 14. The method of claim 13 wherein said further processing is the cleaving and preparation of substrates.

15. A method of manufacturing arrays of biological materials comprising:
preparing a plurality of substrates;
fabricating arrays of biological materials on at least one of said substrates;
separating said arrays formed on said at least one substrate;
5 packaging selected of said separated arrays; and
testing said packaged arrays.

16. The method of claim 15 further comprising:
10 performing a first test on a sample of said substrates after said preparing step and, if said sample fails said first test step, discarding said substrates.

17. The method of claim 16 further comprising:
15 performing a second test on said at least one of said substrates after said fabricating step and, if said at least one of said substrates fails said second test, discarding said at least one of said substrates.

18. The method of claim 17 further comprising:
20 performing a third test on said arrays after said separating step and, if said arrays fail said third test, discarding said arrays.

19. The method of claim 18 further comprising:
25 performing a fifth test on said separated arrays after said packaging step and, if said arrays fail said fifth test, discarding said arrays.

20. The method of claim 19 further comprising:

performing a sixth test on said packaged arrays after said testing step and, if said arrays fail said sixth step, discarding said arrays.

5 21. A method of manufacturing arrays of biological materials comprising:

preparing a plurality of substrates;

testing said plurality of substrates;

fabricating arrays of biological materials on at least one of said substrates;

separating said arrays formed on said at least one substrate;

packaging selected of said separated arrays;

wherein said fabricating, separating, and packaging steps are performed only when said substrates pass said testing step.

10 22. A method of manufacturing arrays of biological materials comprising:

preparing a plurality of substrates;

fabricating arrays of biological materials on at least one of said substrates;

testing said fabricated arrays of biological materials;

separating said arrays formed on said at least one substrate;

packaging selected of said separated arrays;

20 wherein said separating and packaging steps are performed only when said fabricated

arrays pass said testing step.

23. A method of manufacturing arrays of biological materials comprising:

preparing a plurality of substrates;

fabricating arrays of biological materials on at least one of said substrates;

separating said arrays formed on said at least one substrate;

testing said separated arrays;

5 packaging selected of said separated arrays;

wherein said packaging step is performed only when said separated arrays pass said

testing step.

24. A method of manufacturing arrays of biological materials comprising:

10 preparing surfaces on a plurality of substrates;

depositing xilene on said substrate surfaces;

testing a sample of said substrates; and

discarding said substrates when said sample fails said testing step.

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